

WHAT IS CLAIMED IS:

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1. A synchronous network establishing method of establishing a synchronous network in which a node apparatus conforming to a first scheme and a node apparatus conforming to a second scheme co-reside, wherein the first  
10 scheme and the second scheme implement different synchronous state indication codes for establishing the synchronous network, said method comprising the step of:

converting a first synchronous state indication code that is supplied from the node apparatus conforming to one  
15 of the first scheme and the second scheme into a second synchronization state indication code for the node apparatus conforming to the other one of the first scheme and the second scheme.

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2. The synchronous network establishing method as claimed in claim 1, further comprising the step of:

25 including the first synchronous state indication code that is supplied from the node apparatus conforming to one of the first scheme and the second scheme in an empty bit of the converted second synchronous state indication code.

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3. The synchronous network establishing method as  
35 claimed in claim 1, further comprising the step of:

using a pre-converted synchronous state indication code included in an empty bit of the first synchronous state

indication code that is supplied from the node apparatus conforming to one of the first scheme and the second scheme.

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4. A node apparatus conforming to one of a first scheme and a second scheme that is connected to a counterpart node apparatus conforming to the other one of the first scheme and the second scheme, wherein the first scheme and the second scheme implement different synchronous state indication codes for establishing a synchronous network, said node apparatus comprising:

10 a synchronous state indication code converting unit  
15 for converting the synchronous state indication code supplied from the counterpart node apparatus into the other synchronous state indication code for said node apparatus conforming to one of the first scheme and the second scheme.

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5. The node apparatus as claimed in claim 4, further comprising:

25 a selecting unit for selecting one of the synchronous state indication code supplied from the counterpart node and the converted synchronous state indication code obtained by the synchronous state indication code converting unit.

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6. The node apparatus as claimed in claim 5, wherein  
35 the selecting unit administers switching according to a switching instruction signal.

5       7. The node apparatus as claimed in claim 5, further comprising:

      a switch unit for instructing a switching of the selecting unit.

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      8. The node apparatus as claimed in claim 5, further comprising:

15       a switching instruction unit for detecting a predetermined bit of a signal supplied from the counterpart node apparatus to determine which of the first scheme and the second scheme said counterpart node apparatus conforms to, and instructing a switching of the selecting unit based on the determination.

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25       9. The node apparatus as claimed in claim 4, wherein a content to be converted by the synchronous state indication code converting unit can be arbitrarily changed.